

Prather notes – report on numerical issues. (Tues 25 May 2004, a.m.)

GMI vision: provide a formal testing/evaluation of atmospheric composition models that will be used in larger frameworks (coupled chemistry-climate, ESM) and assessments. GMI should give an assessment of the accuracy of CTMs and hence our ability to predict changes in atmospheric composition.

- 1) CTM differences/errors have been identified in strat and trop using the CO<sub>2</sub> simple tracer experiment at GMI and UCI.
  - a) paper to document these differences.
  - b) 2<sup>nd</sup> paper on 2x-to-convergence will use UCI (?and GMI) results.
- 2) Current GMI strat runs at 2x2.5 and 4x5 could be redesigned to address the 2x-to-convergence! add a 2x2.5 CTM with 4x5 met fields, and a 2x2.5 CTM+met with 4x5 averaged chemistry.
- 3) Be prepared to run GMI at 2x resolution (at least for tracer transport) in order to assess error – OR??? take UCI CTM and convert to GMI code.
- 4) Start the comparison of different assimilated/forecast met fields in GMI. Use at least 3 fields to assess error as compared with year-specific observations. Pick a year based on obs-validation data sets AND what is immediately available. Pick a future year for AURA (?2005) and get to work on planning to deliver promptly in mid-late 2005.